R. O.

S
CONTROL - Shasta
Insects
(Burney Project)

Fall River Mills, California
May 5, 1946

REPORT ON INSECT CONTROL MAINTENANCE PROJECT

Burney Flats Area

Pit District

Shasta National Forest

1946

Submitted by:

Timber Management Assistant

May 4, 1946

Approved by:

L. L. Feight
District Forest Ranger

May 13, 1946

Forest Supervisor

July 18, 1946

REPORT ON INSECT CONTROL MAINTENANCE PROJECT

Burney Flats Area

Pit District

Shasta National Forest

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SUMMARY

Forest - Shasta
Project Name - Burney Flats Insect Control Maintenance
Duration - March 12 to April 11 (1946), inclusive
Tree species affected - Ponderosa pine (Pinus ponderosa)
Insect responsible - Western pine beetle (Dendroctonus brevicomis)
Total Acreage involved - 4200
Method of control - Direct peel-burn
Number of trees spotted - 71
Number of trees treated - 61
Volume of timber treated (F. B. M.) - 65,080
Number of man-days used - 125
Expended from project funds - $ 973.84
Expended from contributed time - $ 114.53
Total cost of project - $1088.37
Cost per acre - $ 0.26
Cost per tree - $17.84
Cost per M. B. M. - $16.72
Results - Satisfactory; 1947 examination will decide
Percent of reduction obtained - Estimated 90

Insect control work has been completed to the extent of available funds on the Burney Flats project area. The virgin timber lands were intensively examined and practically all treated; the cutover lands were given only a cursory inspection, but infestation on these was found to be very light.

HISTORY

The Burney Flats unit lies in Township 36 North, Range 5 East, Mount Diablo Meridian (See project plan submitted March 7, 1946 for legal description) and comprises a pure pine timber type. The Fruit Growers Supply Company is the principal private owner; the Government owns some 8700 acres, half of which is cutover.

A major insect control program was conducted in 1945 to relieve the epidemic infestation in the Burney-McCloud area. Since 1945 the cycle has changed from an Ips epidemic to an endemic stage dominated by Dendroctonus infestation. By mutual agreement the State, the U. S. Forest Service, and the principal private owners entered into a cooperative plan proposed by the Bureau of Entomology and Plant Quarantine to carry on a maintenance control program on the Burney Flats unit this past spring. The Forest Service handled the control work on Government lands as its share of the cooperative effort. The current degree of infestation was very light; the treated volume averaged only fifteen board feet per acre--this amounted to only one tree per sixty-nine acres.

ORGANIZATION

As mentioned above the Bureau coordinated the efforts of State, Federal, and private agencies. The State control men worked together with a few company field men in the treatment of private lands from a camp located at Burney. The Forest Service crew commuted from District headquarters at Fall River Mills.

The same Forest personnel who worked on the Burney Falls State Park maintenance control project continued on the Burney Flats job-- namely, Call and Cellerman on spotting and McGrue, Porter, Sylvester, and O'Neal on treating. Vermont Dolan continued in the capacity of crew foreman and performed in a very commendable fashion.

Spotting began on March 12, and treating was carried on continuously from March 18 through April 11. The weather was intermittently unsettled but did not cut down on the rate of progress or production.

ACCOMPLISHMENT

Work methods were generally in accordance with standard practice and continued along the same lines of organization used in the Burney Falls State Park unit.

A gross of 71 trees and 4300 acres was spotted; this amounts to an average of 3.2 trees and 195 acres per man-day of spotting. (Spotting included 17 man-days of direct labor and 5 man-days of contributed time.)

Sixty-one trees were treated on an area of 4300 acres in 81 man-days' time; this averages 0.75 trees and 52 acres per man-day of treating. It is estimated that three-quarters of the treating time was spent in peeling.

Only a hurried examination was made of the cutover lands; the degree of infestation on these was found to be extremely light. Only two trees, on the lava rim near the center of Section 14, were actually found to contain aggressive infestation. Within the sale area subunit only the virgin parcel of about one hundred acres, lying in Sections 22 and 27, was examined and treated.

The southeast-most part of the virgin subunit was not treated due to lack of funds; a few other trees, containing smaller broods, were left in Section 34 when it became apparent that funds would not allow time to treat every infested tree. The west portion of Section 31, located in the southwest corner of the subunit, was not examined since it lies across a brushy ridge and in the Goose Valley visinity which is entirely outside Burney Flats itself. Actually the State did not work on the upper slopes above (to the west of) Long Valley, so we feel that the exception of the west part of Section 31 was reasonable enough.

At the request of the B. E. & P. Q. (see Bureau letter to Forest Supervisor of April 2, 1946) a check was made on an insect infested group on Hatchet Mountain south of Highway 299. Basal examination disclosed only one tree to be aggressively infested; this single tree was treated directly.

COSTS

Direct Costs

Spotting	
Labor - 17 man-days.....	$ 143.41
Travel - 385 miles @ $0.055.....	21.18
- 51 miles @ 0.1075....	5.48
Subtotal Spotting.....	$ 170.01
Treating	
Labor - 81 man-days.....	627.53
Travel - 788 miles @ $0.065.....	51.22
Subtotal Treating.....	$ 678.75
Office Overhead.....	120.08
Miscellaneous Supplies (estimated)...	5.00
Subtotal Direct Costs.....	$ 973.84

Contributed Time

Field - 7½ man-days.....	74.19
Office - 4 man-days.....	40.34
Subtotal Contributed Time.....	$ 114.53
Total Cost of Project.....	$1088.37

Direct costs proved to be a hundred dollars higher than estimated, due in part to the unexpected relatively heavy concentration of infested trees in the southeast corner of the virgin subunit, principally in Sections 28 and 35.

APPENDIX

Record of Individual Trees Spotted

Number	D. b. h.	Remarks
18	18	
19	34	
20	28	
21	12	
22	16	
23	12	
24	16	
25	28	
26	28	
27	20	
28	36	
29	28	
30	30	
31	24	
32	18	
33	14	Untreated
34	36	
35	16	Untreated
S- 5	36	
S- 6	34	
S- 7	24	
S- 10	24	
S-102	26	
S-104	28	
S-105	30	Section 33
S-105	14	Section 28
S-107	40	
S-108	24	
S-109	14	Section 33
S-109	18	Section 28
S-111	26	
S-112	24	
S-113	18	
S-115	28	
S-154	18	

Number	D. B. h.	Remarks
521	26	
522	12	
523	14	
524	36	
525	32	
526	32	
527	24	
528	32	
529	40	
530	40	
531	32	
532	52	
533	14	
534	26	
535	18	
536	24	
537	26	
538	32	
539	26	Untreated
541	38	Untreated
542	20	
543	12	
544	40	
545	28	
546	28	Untreated
547	20	
548	36	Untreated
549	32	Untreated
550	30	Untreated
551	20	Untreated
552	26	
553	24	
554	28	
555	26	
556	32	Untreated
557	18	
L-1	26	Outside unit, not included in statistics

Note: S-prefix designates State spotted trees
L-prefix designates Lassen tree on Hatchet Mountain

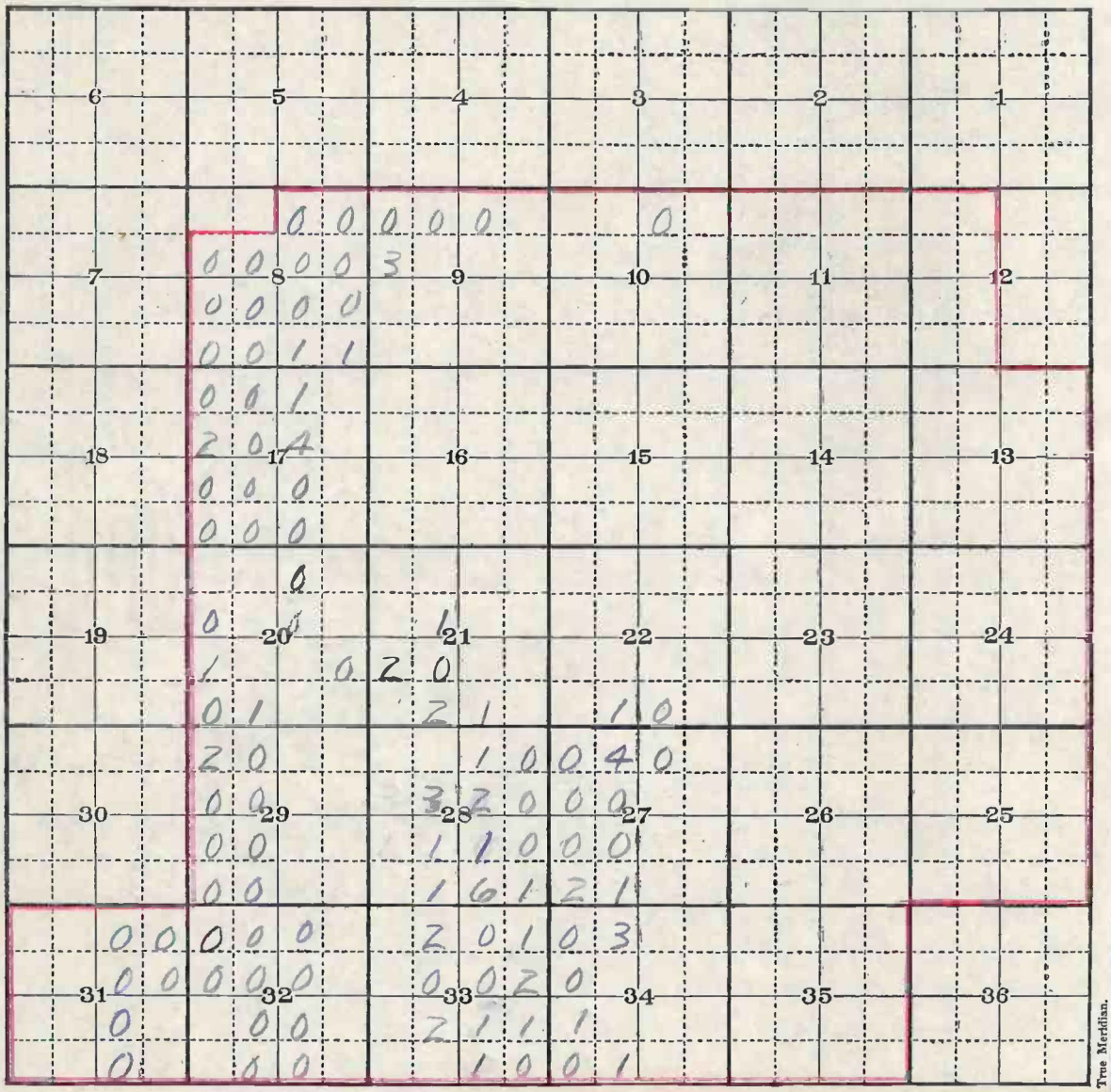
Plat of Number of Trees Treated by Forties

Burney Flats Area

1946

Form 974.

T. 36 N. R. 3 E. M. D. Mer.



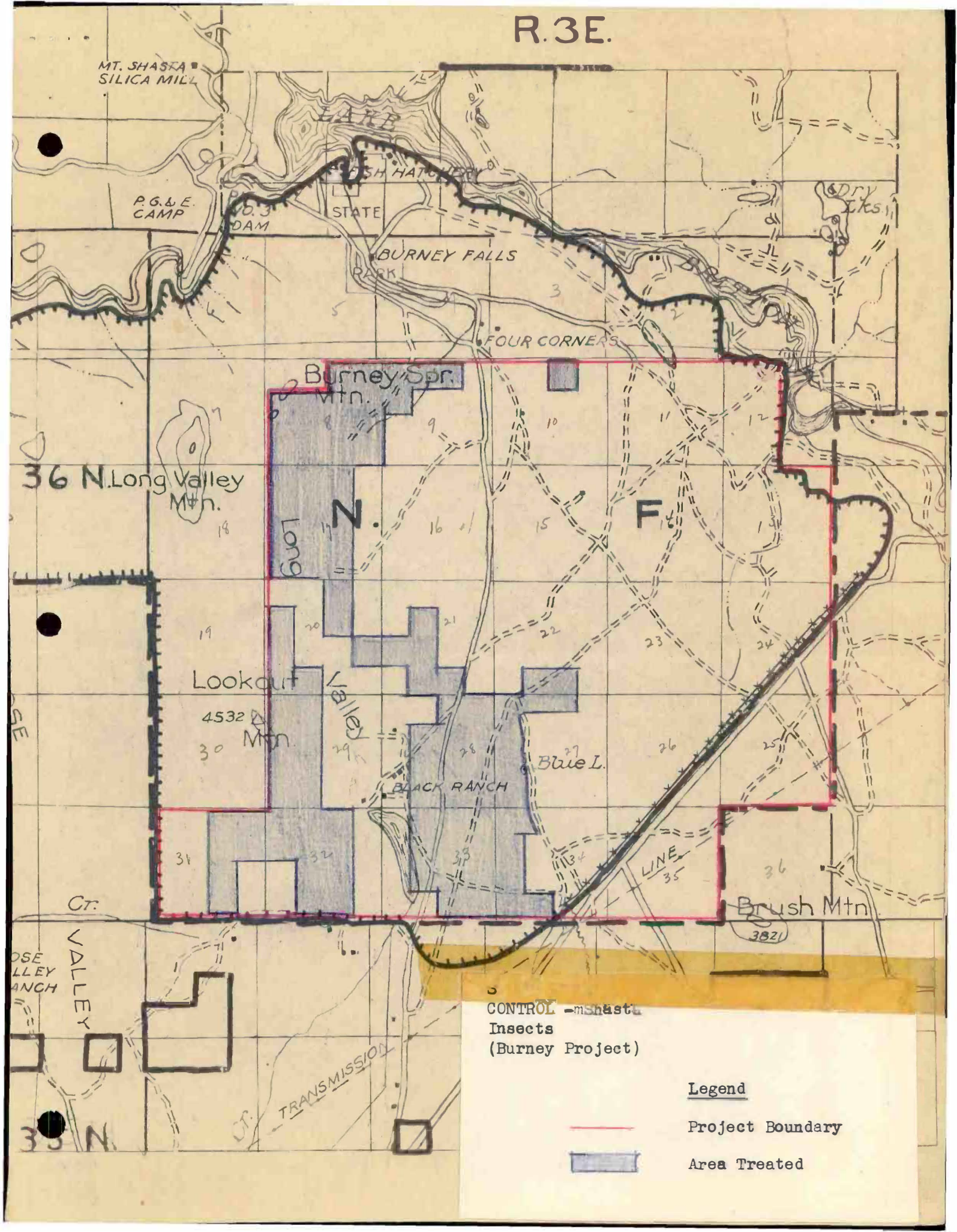
True Meridian.

8—257

SCALE.—One inch = 1 mile.

U.S. GOVERNMENT PRINTING OFFICE

Project Boundary


R.3E.
MT. SHASTA SILICA MILL
LAKE
FISH HATCHERY
P.G.&E. CAMP
U.S. DAM
STATE
Dry Lks.
BURNEY FALLS PARK
FOUR CORNERS
Burney Spr. Mtn.
36 N.
Long Valley Mtn.
N.
F.
Long
Lookout Valley
4532 Mtn.
Blue L.
BLACK RANCH
LINE
Brush Mtn.
3821
Ct.
VALLEY
TRANSMISSION
35 N.
CONTROL - Insects
(Burney Project)
Legend
Project Boundary
Area Treated